

What is claimed is:

1. A medical image radiographing system comprising:
  - a control apparatus for managing a medical image and radiographing order information by relating the medical image to the radiographing order information; and
  - a portable terminal for obtaining the radiographing order information from the control apparatus,
    - the portable terminal comprising:
      - an obtaining section for obtaining identification information of a cassette for recording the medical image radiographed based on the radiographing order information obtained from the control apparatus;
      - a storage for storing the identification information of the cassette obtained by relating the identification information of the cassette to the radiographing order information, and storing the radiographing order information renewed according to radiographing; and
      - a communication section for transmitting the radiographing order information and the identification information of the cassette stored in the storage,
    - the control apparatus comprising:
      - a storage for storing radiographing order information;
      - a communication section for receiving the radiographing order information and the identification information of the cassette;

a determination section for determining whether the radiographing order information received agrees with the radiographing order information stored in the storage or not; and

a management section for controlling both the radiographing order information stored and the radiographing order information received and the identification information of the cassette thereto, according to a result determined by the determination section.

2. The system of claim 1, wherein the management section stores the identification information of the cassette relating to the radiographing order information stored in the storage, when the radiographing order information received agrees with the radiographing order information stored.

3. The system of claim 1, wherein the control apparatus further comprises:

a display control section for displaying a message for confirming whether to renew the radiographing order information stored in the storage or not, when determining that the radiographing order information received disagrees with the radiographing order information stored in the storage; and

an input control section for inputting an instruction to renew the radiographing order information stored in the storage or not, and

the management section stores the radiographing order information received in the storage by renewing the radiographing order information stored in the storage to the radiographing order information received, and stores the identification information of the cassette in the storage by relating the identification information of the cassette to the radiographing order information, when the instruction to renew the radiographing order information stored in the storage is inputted.

4. The system of claim 3, wherein in the control apparatus, the input control section inputs modification to the radiographing order information received, and

the management section stores the radiographing order information modified in the storage by renewing the radiographing order information stored in the storage to the radiographing order information modified, and stores the identification information of the cassette in the storage by relating the identification information of the cassette to the radiographing order information, when the instruction to renew the radiographing order information stored in the storage is inputted.

5. The system of claim 3, wherein in the control apparatus, the storage stores a transmission history for indicating whether the radiographing order information is transmitted to the portable terminal or not,

the display control section displays a message for confirming whether to cancel the radiographing order information received or not, when determining that the radiographing order information received disagrees with the radiographing order information stored in the storage,

the input control section inputs an instruction to cancel the radiographing order information received or not, and

the management section transmits the instruction to cancel the radiographing order information received to the portable terminal by controlling the communication section, and stores the transmission history of the radiographing order information stored, renewed to be not transmitted in the storage, when the instruction to cancel the radiographing order information received is inputted, and

in the portable terminal, the communication section receives the instruction to cancel the radiographing order information transmitted from the control apparatus, and

the storage deletes the radiographing order information corresponding to the instruction to cancel the radiographing order information received.

6. The system of claim 1, further comprising an information management apparatus for transmitting radiographing order information to the control apparatus, wherein the management section in the control apparatus transmits the radiographing order information and the identification information of the cassette stored in the storage to the information management apparatus, by controlling the communication section, and the information management apparatus comprises:  
a communication section for receiving the radiographing order information and the identification information of the cassette; and  
a storage for storing the radiographing order information and the identification information of the cassette received.

7. A medical image management method for a medical image radiographing system comprising a control apparatus for managing a medical image and radiographing order information by relating the medical image to the radiographing order information and a portable terminal for obtaining the radiographing order information from the control apparatus, the method comprising:

obtaining identification information of a cassette for recording the medical image radiographed based on the radiographing order information obtained from the control

apparatus;

storing the identification information of the cassette obtained by relating the identification information of the cassette to the radiographing order information, and storing the radiographing order information renewed according to radiographing;

transmitting the radiographing order information and the identification information of the cassette stored;

storing radiographing order information in a storage;

receiving the radiographing order information and the identification information of the cassette;

determining whether the radiographing order information received agrees with the radiographing order information stored in the storage or not; and

controlling both the radiographing order information stored and the radiographing order information received and the identification information of the cassette thereto, according to a result determined.

8. The method of claim 7, further comprising storing the identification information of the cassette relating to the radiographing order information stored in the storage, when the radiographing order information received agrees with the radiographing order information stored.

9. The method of claim 7, further comprising:

displaying a message for confirming whether to renew the radiographing order information stored in the storage or not, when determining that the radiographing order information received disagrees with the radiographing order information stored in the storage;

inputting an instruction to renew the radiographing order information stored in the storage or not; and

storing the radiographing order information received in the storage by renewing the radiographing order information stored in the storage to the radiographing order information received, and storing the identification information of the cassette in the storage by relating the identification information of the cassette to the radiographing order information, when the instruction to renew the radiographing order information stored in the storage is inputted.

10. The method of claim 9, further comprising:

inputting modification to the radiographing order information received; and

storing the radiographing order information modified in the storage by renewing the radiographing order information stored in the storage to the radiographing order information modified, and storing the identification information of the cassette in the storage by relating the

identification information of the cassette to the radiographing order information, when the instruction to renew the radiographing order information stored in the storage is inputted.

11. The method of claim 9, further comprising:

storing a transmission history for indicating whether the radiographing order information is transmitted to the portable terminal or not;

displaying a message for confirming whether to cancel the radiographing order information received or not, when determining that the radiographing order information received disagrees with the radiographing order information stored in the storage;

inputting an instruction to cancel the radiographing order information received or not;

transmitting the instruction to cancel the radiographing order information received to the portable terminal, and storing the transmission history of the radiographing order information stored, renewed to be not transmitted in the storage, when the instruction to cancel the radiographing order information received is inputted;

receiving the instruction to cancel the radiographing order information transmitted; and

deleting the radiographing order information corresponding to the instruction to cancel the



radiographing order information received.

12. The method of claim 7, further comprising:  
transmitting the radiographing order information and the identification information of the cassette stored in the storage to an information management apparatus;  
receiving the radiographing order information and the identification information of the cassette; and  
storing the radiographing order information and the identification information of the cassette received.

13. A medical image management method for a medical image radiographing system comprising a control apparatus for managing a medical image and radiographing order information by relating the medical image to the radiographing order information and a portable terminal for obtaining the radiographing order information from the control apparatus, the method comprising:

obtaining identification information of a cassette for recording the medical image radiographed based on the radiographing order information obtained from the control apparatus;

storing the identification information of the cassette obtained by relating the identification information of the cassette to the radiographing order information in the portable terminal, and storing the

radiographing order information renewed according to  
radiographing in the portable terminal;

transmitting the radiographing order information and  
the identification information of the cassette stored in  
the portable, from the portable terminal to the control  
apparatus;

storing radiographing order information in a storage  
of the control apparatus;

determining whether the radiographing order  
information received by the control apparatus agrees with  
the radiographing order information stored in the storage  
or not; and

storing the identification information of the  
cassette received by the control apparatus in the storage  
by relating the identification information of the cassette  
to the radiographing order information stored in the  
storage when determining that the radiographing order  
information received by the control apparatus agrees with  
the radiographing order information stored in the storage.

14. A medical image radiographing system  
comprising:

a control apparatus for managing a medical image and  
radiographing order information by relating the medical  
image to the radiographing order information; and

a portable terminal for obtaining the radiographing

order information from the control apparatus,

the portable terminal comprising:

an obtaining section for obtaining identification information of a cassette for recording the medical image radiographed based on the radiographing order information obtained from the control apparatus;

a storage for storing the identification information of the cassette obtained by relating the identification information of the cassette to the radiographing order information;

an editing section for editing the radiographing order information stored in the storage; and

a communication section for transmitting the radiographing order information and the identification information of the cassette stored in the storage,

the control apparatus comprising:

a storage for storing radiographing order information;

a communication section for receiving the radiographing order information and the identification information of the cassette; and

a management section for storing the radiographing order information received in the storage by renewing the radiographing order information stored in the storage to the radiographing order information received, and storing the identification information of the cassette in the

storage by relating the identification information of the cassette to the radiographing order information.

15. The system of claim 14, wherein the control apparatus further comprises a determination section for determining whether the radiographing order information received agrees with the radiographing order information stored in the storage or not,

the communication section transmits a message for confirming whether to renew the radiographing order information stored in the storage or not to the portable terminal, and receives an instruction to renew the radiographing order information stored in the storage or not from the portable terminal, when the radiographing order information received disagrees with the radiographing order information stored in the storage, and

the management section stores the radiographing order information received in the storage by renewing the radiographing order information stored in the storage to the radiographing order information received, and stores the identification information of the cassette in the storage by relating the identification information of the cassette to the radiographing order information, when receiving the instruction to renew the radiographing order information stored in the storage from the portable terminal.

16. The system of claim 15, wherein the management section in the control apparatus stores the identification information of the cassette in the storage by relating the identification information of the cassette to the radiographing order information stored in the storage when receiving the instruction not to renew the radiographing order information stored in the storage from the portable terminal.

17. The system of claim 14, wherein in the control apparatus, the storage stores a transmission history for indicating whether the radiographing order information is transmitted to the portable terminal or not,

the communication section transmits a message for confirming whether to cancel the radiographing order information received or not, and receives an instruction to cancel the radiographing order information received or not from the portable terminal, when the radiographing order information received disagrees with the radiographing order information stored in the storage, and

the management section stores the transmission history for the radiographing order information stored in the storage, in the storage by renewing the transmission history to be not transmitted when receiving the instruction to cancel the radiographing order information

received from the portable terminal.

18. The system of claim 14, further comprising an information management apparatus for transmitting radiographing order information to the control apparatus, wherein the management section in the control apparatus transmits the radiographing order information and the identification information of the cassette stored in the storage to the information management apparatus, by controlling the communication section, and

the information management apparatus comprises:

a communication section for receiving the radiographing order information and the identification information of the cassette; and

a storage for storing the radiographing order information and the identification information of the cassette received.

19. A medical image management method for a medical image radiographing system comprising a control apparatus for managing a medical image and radiographing order information by relating the medical image to the radiographing order information and a portable terminal for obtaining the radiographing order information from the control apparatus, the method comprising:

obtaining identification information of a cassette

for recording the medical image radiographed based on the radiographing order information obtained from the control apparatus;

storing the identification information of the cassette obtained by relating the identification information of the cassette to the radiographing order information;

editing the radiographing order information stored;

transmitting the radiographing order information and the identification information of the cassette stored;

storing radiographing order information in a storage;

receiving the radiographing order information and the identification information of the cassette; and

storing the radiographing order information received in the storage by renewing the radiographing order information stored in the storage to the radiographing order information received, and storing the identification information of the cassette in the storage by relating the identification information of the cassette to the radiographing order information.

20. The method of claim 19, further comprising:

determining whether the radiographing order information received agrees with the radiographing order information stored in the storage or not;

transmitting a message for confirming whether to

renew the radiographing order information stored in the storage or not, when the radiographing order information received disagrees with the radiographing order information stored in the storage;

receiving an instruction to renew the radiographing order information stored in the storage or not from the portable terminal; and

storing the radiographing order information received in the storage by renewing the radiographing order information stored in the storage to the radiographing order information received, and storing the identification information of the cassette in the storage by relating the identification information of the cassette to the radiographing order information, when receiving the instruction to renew the radiographing order information stored in the storage from the portable terminal.

21. The method of claim 20, further comprising:  
storing the identification information of the cassette in the storage by relating the identification information of the cassette to the radiographing order information stored in the storage when receiving the instruction not to renew the radiographing order information stored in the storage from the portable terminal.

22. The method of claim 19, further comprising:



storing a transmission history for indicating whether the radiographing order information is transmitted to the portable terminal or not;

transmitting a message for confirming whether to cancel the radiographing order information received or not, when the radiographing order information received disagrees with the radiographing order information stored in the storage;

receiving an instruction to cancel the radiographing order information received or not from the portable terminal; and

storing the transmission history for the radiographing order information stored in the storage, in the storage by renewing the transmission history to be not transmitted when receiving the instruction to cancel the radiographing order information received from the portable terminal.

23. The method of claim 19, further comprising:

transmitting the radiographing order information and the identification information of the cassette stored in the storage to an information management apparatus;

receiving the radiographing order information and the identification information of the cassette; and

storing the radiographing order information and the identification information of the cassette received.

24. A medical image management method for a medical image radiographing system comprising a control apparatus for managing a medical image and radiographing order information by relating the medical image to the radiographing order information and a portable terminal for obtaining the radiographing order information from the control apparatus, the method comprising:

obtaining identification information of a cassette for recording the medical image radiographed based on the radiographing order information obtained from the control apparatus;

storing the identification information of the cassette obtained in the portable terminal by relating the identification information of the cassette to the radiographing order information;

editing the radiographing order information stored in the portable terminal;

transmitting the radiographing order information and the identification information of the cassette stored in the portable terminal, from the portable terminal to the control apparatus;

storing radiographing order information in a storage of the control apparatus; and

storing the radiographing order information received by the control apparatus in the storage by renewing the

radiographing order information stored in the storage to the radiographing order information received by the control apparatus, and storing the identification information of the cassette in the storage by relating the identification information of the cassette to the radiographing order information.

25. A medical image radiographing system comprising:

a control apparatus for holding radiographing order information in a readable state, and transmitting the radiographing order information to an external apparatus according to a reading instruction; and

a portable terminal connectable to the control apparatus through a communication network,

the portable terminal comprising:

a storage for storing the radiographing order information obtained from the control apparatus;

a display for displaying an addition input screen for inputting to add radiographing order information when permitted doctor identification information is inputted;

an addition processing section for adding the radiographing order information inputted on the addition input screen to the radiographing order information stored in the storage; and

a transmission section for transmitting the

radiographing order information added to the control apparatus through the communication network.

26. The system of claim 25, further comprising an information management apparatus for generating and storing radiographing order information on the basis of radiographing reservation input,

wherein the control apparatus further comprises an obtaining section for obtaining the radiographing order information by reading the radiographing order information out of the information management apparatus through the communication network.

27. The system of claim 26, wherein the control apparatus further comprises:

a receiving section for receiving the radiographing order information added transmitted from the portable terminal;

an addition processing section for adding the radiographing order information received to the radiographing order information held; and

a transmission section for transmitting the radiographing order information added to the information management apparatus through the communication network, and

the information management apparatus comprises:

a receiving section for receiving the radiographing

order information added transmitted from the control apparatus; and

an addition processing section for adding the radiographing order information received in the radiographing order information stored.

28. The system of claim 25, further comprising an information management apparatus for generating radiographing order information on the basis of radiographing reservation input,

wherein the portable terminal has a structure capable of reading the radiographing order information out of the information management apparatus through the communication network.

29. The system of claim 25, further comprising an X-ray radiographing apparatus which is movable and radiographs with X-ray by using a cassette on the basis of the radiographing order information,

wherein the control apparatus comprises:

an extracting section for extracting radiographing order information using the cassette from the radiographing order information held; and

a transmission section for transmitting the radiographing order information extracted by the extracting section to the portable terminal.

30. A portable terminal capable of being connected to a control apparatus for holding radiographing order information in a readable state and transmitting the radiographing order information to an external apparatus according to a reading instruction, through a communication network, the portable terminal comprising:

a receiving section for receiving the radiographing order information from the control apparatus;

a storage for storing the radiographing order information received;

an input section for inputting doctor identification information;

a display for displaying an addition input screen for inputting to add radiographing order information when the doctor identification information which is permitted is inputted;

a radiographing order information addition processing section for adding the radiographing order information inputted on the addition input screen to the radiographing order information stored in the storage; and

a transmission section for transmitting the radiographing order information inputted on the addition input screen to the control apparatus.

31. A medical image radiographing system

comprising:

- a control apparatus for managing a medical image and radiographing order information on medical radiographing by relating the medical image to the radiographing order information; and

- a portable terminal for receiving the radiographing order information from the control apparatus,

- the portable terminal comprising:

- a first communication section for communicating with the control apparatus; and

- a first control section for transmitting radiographing history information related to the radiographing order information to the control apparatus through the first communication section,

- the control apparatus comprising:

- a second communication section for communicating with the portable terminal;

- an input section for receiving input of information;
- and

- a second control section for determining whether it is possible to communicate with the portable terminal through the second communication section or not, and receiving input of the radiographing history information through the input section when determining that it is impossible to communicate with the portable terminal.

32. The system of claim 31, wherein the second control section receives the radiographing history information from the portable terminal through the second communication section when determining that it is possible to communicate with the portable terminal.

33. The system of claim 31, further comprising a communication terminal for mediating communication between the portable terminal and the control apparatus when the communication terminal is connected to the second communication section and the portable terminal is connected to the communication terminal,

wherein the second control section determines whether it is possible to communicate with the portable terminal through the second communication section or not in a state the portable terminal is connected to the communication terminal.

34. The system of claim 31, wherein the control apparatus further comprises a display for displaying information, and

the second control section displays the radiographing history information inputted.

35. A medical image management method for a medical image radiographing system comprising a control apparatus



for managing a medical image and radiographing order information on medical radiographing by relating the medical image to the radiographing order information and a portable terminal for receiving the radiographing order information from the control apparatus, the method comprising:

transmitting radiographing history information related to the radiographing order information from the portable terminal to the control apparatus; and

determining whether it is possible to communicate with the portable terminal or not, and receiving input of the radiographing history information when determining that it is impossible to communicate with the portable terminal, in the control apparatus.

36. The method of claim 35, further comprising receiving the radiographing history information from the portable terminal when determining that it is possible to communicate with the portable terminal, in the control apparatus.

37. The method of claim 35, wherein the medical image radiographing system further comprises a communication terminal for mediating communication between the portable terminal and the control apparatus when the communication terminal is connected to the control

apparatus and the portable terminal is connected to the communication terminal, and

the determining whether it is possible to communicate with the portable terminal or not includes determining whether it is possible to communicate with the portable terminal or not in a state the portable terminal is connected to the communication terminal, in the control apparatus.

38. The method of claim 35, further comprising displaying the radiographing history information inputted in the control apparatus.

39. A medical image radiographing system comprising:

a control apparatus for managing a medical image and radiographing order information by relating the medical image to the radiographing order information;

a portable terminal comprising an obtaining section for obtaining the radiographing order information from the control apparatus, and a transmission section for transmitting a radiographing result corresponding to the radiographing order information obtained by the obtaining section to the control apparatus;

a determination section for determining relationship between the radiographing order information transmitted

from the control apparatus to the portable terminal and the radiographing result corresponding to the radiographing order information by the portable terminal; and

a control section for controlling transmission of the radiographing result from the portable terminal to the control apparatus on the basis of a determination result determined by the determination section.

40. The system of claim 39, further comprising at least one of the control apparatus connected through a network.

41. The system of claim 40, further comprising at least one of the portable terminal capable of communicating with the at least one of the control apparatus through the network.

42. The system of claim 40, further comprising at least one of the portable terminal capable of communicating with a specific control apparatus among the at least one of the control apparatus through the network.

43. A medical image radiographing system comprising:

a radiographing order information generating apparatus for generating radiographing order information;

a control apparatus for obtaining the radiographing order information, relating the radiographing order information to at least one of related information of the radiographing order information and a medical image, and managing the radiographing order information and the at least one related to the radiographing order information;

a portable terminal comprising an obtaining section for obtaining the radiographing order information from the control apparatus, and a transmission section for transmitting a radiographing result corresponding to the radiographing order information obtained by the obtaining section to the control apparatus;

a determination section for determining relationship between the radiographing order information transmitted from the control apparatus to the portable terminal and the radiographing result corresponding to the radiographing order information by the portable terminal; and

a control section for controlling transmission of the radiographing result from the portable terminal to the control apparatus on the basis of a determination result determined by the determination section.

44. The system of claim 43, further comprising at least one of the control apparatus connected to the radiographing order information generating apparatus through a network.

45. The system of claim 44, further comprising at least one of the portable terminal capable of communicating with the at least one of the control apparatus through the network.

46. The system of claim 44, further comprising at least one of the portable terminal capable of communicating with a specific control apparatus among the at least one of the control apparatus through the network.